RADRUE METHOD FOR RECONSTRUCTION OF INDIVIDUAL DOSES FOR NOT OBSERVED PERSONS IN THE ACCIDENT ON CHERNOBYL NUCLEAR POWER PLANT

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A retrospective assessment of individual doses for persons, for whom there were no radiation monitoring in the accident on Chernobyl NPP was conducted. At most it was the population of the town Pripyat and the liquidators who worked in the early days of the accident. A new method of photon (i.e., gamma and x rays) dose assessment, called RADRUE (Realistic Analytical Dose Reconstruction with Uncertainty Estimation), was developed to calculate this doses. The RADRUE program implements a time-and-motion dose-reconstruction method that is flexible and conceptually easy to understand. It includes a large exposure rate database and interpolation and extrapolation techniques to calculate exposure rates. The RADRUE technique relies on data collected from subjects' interviews conducted by trained interviewers, and on expert dosimetrists to interpret the information and provide supplementary information, when necessary, based upon their own Chernobyl experience.